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EDITED BY DR. ANDREW WILSON, F.R.S.E. &C.

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

I HAVE been much interested in a communication made to the *Lancet* some weeks ago by Dr. R. J. Shepherd on consumption as "a disease of the night." The author maintains that the consumption-bacilli or germs, and other causes, direct or indirect, of the ailment "play their part after the disease has begun." He says that he can put his finger on "the constantly recurring irritation to which the vast majority of phthisical patients owe their disease. It is simply *cold air breathed at night.* Not that cold air in itself seems to be an irritant. If the patient breathed air as cold by day as by night, it would, I believe, be harmless. It is the change from warm air by day to cold air at night that does the mischief.

✿ ✿ ✿

LUNGS predisposed to disease are compelled to accommodate their capillary circulation night after night to a temperature ten, twenty, or thirty degrees below that which they have enjoyed by day. This happens, too, when all the sensations are in abeyance, and they are no longer under the protecting influence of the will. In the early morning, when sleep is deepest the air is coldest, and probably the mouth is wide open, so that the poor lungs have not even the protection of the nasal chambers. Lungs so exposed never get an opportunity to recover their tone. A slight cold, perhaps, starts the mischief, and then this constantly recurring irritation slowly but surely does its work. If the air be close and septic, as well as cold, matters are rendered thereby so much the worse. The secretions become vitiated, and bacilli begin to swarm."

✿ ✿ ✿

IN support of his idea of cold night air as the direct cause of consumption, Dr. Shepherd maintains that "Other things being equal, the more equable the climate the better the results. Patients do well in Australia, where the climate is more equable; they do better still at Davos, where the climate is still more equable; and perhaps best of all in some of the African steppes, where the climate is both equable and genial. To my mind, this is demonstrated with the exactitude of an experiment. If people with undoubted phthisis do get well and remain well whilst in these climates, the cause of their disease must be sought elsewhere than in heredity, diathesis, and bacillus, all-important as these may be in the course and progress of the malady.

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CONVERSELY, I believe that there are certain favoured climes where phthisis is unknown. But let us transport one of their inhabitants, whether man or beast, to this or a similar climate, and it is well known that they are almost sure to die of phthisis. Does not the very course of the disease, as so ably explained to us by those who have made it their special study, seem to point to an ever-recurring irritation of feeble intensity — the gradually progressive mischief downwards from apex towards base? One can almost picture the brave little cells repairing the breaches by day that were made by night, and opposing, millionth of an inch by millionth of an inch, the onward progress of the foe: the thousand conceivable accidents that may occur, explaining why one pair of lungs should succumb sooner than another."

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DR. SHEPHERD modestly advances his views as a mere theory. It is one with which, I fancy, few medical men will wholly agree. As a matter of fact, one may ask, *do* we really breathe a colder air at night than by day? Dr. Shepherd says, because we inhabit hot rooms by day and cold rooms by night, consumption is engendered. Surely the temperature of an ordinary bedroom by night is infinitely higher than that to which we are exposed by day out of doors. He quotes Dr. Fagge to the effect

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that the chief cause of consumption is the habitual re-breathing of our own breath, or, in other words, breathing impure air of overcrowded or badly-ventilated places—and certainly most bedrooms fall to be described under the latter category. In opposition to this view, however, Dr. Shepherd quotes the case of Icelanders, many of whom live under insanitary conditions as to overcrowding, and who yet escape consumption.

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Dr. Shepherd's generalization is of too wide a nature, I fear, to receive acceptance as expressive of the truth about the origin of consumption. A predisposition by family taint to the disease is, doubtless, the paramount cause of consumption — bad air, overcrowding, weak health, chills, and like conditions are all extrinsic causes favouring the development of the germ of the disease in the weakened lung-tissue. In this view, the germ is the direct cause, the bad air, weak health, or family taint are predisposing causes. Dr. Shepherd's advice that we should pay proper attention to the due warming of our bedrooms at night, and all night long, especially in all cases of diseases of the chest, is, of course, not new, but valuable in its way. He believes that "if some means whereby a continuous supply of pure warm air could be given at night to those threatened—ay, and to those actually suffering—with phthisis, we should, in the course of a very few years, find that phthisis was as rare in England as in Egypt or Iceland."

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One point to which Dr. Shepherd does not allude, and which, it seems to me, he should take account of in his theory of cold air at night as a cause of consumption, is found in the facts of the bodily temperature. The bodily heat rises quickly from 6 a.m. to 10 or 11 a.m. At a slower rate it increases to 6 p.m. Then it begins to fall, and reaches its minimum between 4 and 6 a.m. The difference between highest and lowest temperature amounts to about one to one and a half degrees Fahrenheit. This decrease of temperature from 6 p.m. to 6 a.m. takes place partly, of course, during the hours of sleep, and it may be that the lowered vitality of these hours exerts an effect on disease-production such as Dr. Shepherd contends for. That, however, his theory does not suffice to explain the origin of consumption — itself a complex question—seems clear enough. His advice respecting warm bedrooms for delicate subjects is excellent, apart from all theoretical considerations.

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In his last contribution to the physiology of the brain, the eminent physiologist, Professor Goltz, gives an account of a dog from which one entire cerebral hemisphere—that is, half of the cerebrum or true brain—had been removed. Here there was not, as some physiologists would expect, a paralysis and a loss of feeling on the side opposite the injured organ; but the action of the dog was quite normal, only that he preferred the side controlled by the intact hemisphere. This goes to show that in the dog one hemisphere can, to a large extent, perform the functions for the entire body. As a converse proof, if symmetrical regions are removed from both halves of the brain, the result is a much more serious one. An animal lacking both its frontal lobes had its intelligence much diminished, was restless, constantly moving, could not feed itself, could not hold a bone, and was a decidedly abnormal dog. A dog with both its occipital (or hinder) lobes gone shows marked sensory defects, but behaves much more normally than the former dog, thus indicating that the part removed is of vital importance.

Original Essays

"Life is not to live, but to be well."—*Martial.*

SHOULD WE SLEEP AFTER DINNER?

By Dr. Andrew Wilson.

Among the many social questions which are being freely discussed in this age of sanitary education, that which heads this paper is by no means the least important. Over and over again the question, "Is my after-dinner nap right or wrong?" is put to medical men by persons who indulge in what they are pleased to call their "forty winks" after the chief meal of the day. It is notable that no one ever speaks of an "after-tea nap" or an "after-breakfast sleep." Possibly the latter idea is an incongruity, for the plain reason that, having just risen from bed, a nap after breakfast is out of the question, for a healthy person at least; while the stimulant effect of tea may perhaps account for the non-existence of the habit of sleeping after the latter meal.

Again, it is perhaps worthy of note that after-dinner "nappers" are, for the most part, represented by those persons who, firstly, dine late, and who, secondly, dine well. As far as my experience goes, I have rarely met with a case wherein a genuine working man, taking his noonday or one o'clock dinner, indulges in a tendency to sleep. Contrariwise, the habit is common among the well-to-do, who dine at six, seven, or eight o'clock, and who, in the absence of a visit to the theatre or a party-engagement, sink into the arms of Morpheus, and pass the interval between dinner and bedtime in a kind of slumber of repletion, if so it may be termed. I may be reminded, of course, that many animals indulge in slumber after eating. The argument from nature will always appeal forcibly to many minds, unless its fallacies are pointed out.

For example, I find an able American writer, Dr. Felix S. Oswald, writing in the following strain respecting post-prandial repose. Says Dr. Oswald: "What can be the origin of the idiotic, yet so very far spread, idea that sleep, after dinner, is injurious?* The fact, perhaps, that it is natural? That fact can certainly not be doubted by any one studying the bias of his physical intuitions. The language of instinct, in its plainest terms, demands rest, and if possible, sleep, after every full meal. In midsummer the emphasis of that demand is apt to thwart all opposition. At 2 p.m. we find deacons nodding in their pews and school teachers in their chairs, and even the dread of an immediate discharge does not prevent poor factory children from falling asleep at the side of their crashing looms.

"Infants whom no cradling will silence can be put to sleep by a good nursing. In a menagerie the after-dinner hour is the quietest of the twenty-four. My pet Chacma baboon likes to keep late hours as long as the chimney-fire keeps up its flicker, but after a good dinner of milk and bread she often volunteers a nap in the early afternoon. After a full meal cows sleep in the tree-shade and wolves in their den, and even the restless hyæna stops its zigzag rushes and takes a stretch in the corner of its cage. The most ravenous eater of all vertebrate animals enjoys the deepest slumbers, the

* I think he is beside the mark when he states that people regard the after-dinner nap as "injurious." From the widespread nature of the habit, on this side of the Atlantic at least, I imagine, few of its votaries deem it to be anything but an excellent practice.

after-meal rests of the deer-swallowing boa being a complete syncope of conscious energy. The fear of letting children leave the house during the hot afternoon hours benefits them indirectly by saving them from after dinner errands, but there is no need of keeping them awake by listless indoor play; let them follow the promptings of instinct and take a nap on the hall lounge or in the corner of an airy porch; the noon breeze stirs the tree-tops even on the warmest days, and makes the early afternoon more sleep-inviting than the first hours of a sultry night."

Now, this is energetic language enough. Let us, therefore, examine Dr. Oswald's contentions, and test them by the light of scientific reasoning.

In the first place, to compare a human being, and especially a civilized person, with either a Chacma baboon, a cow, a hyæna, or a boa constrictor, is a parallelism entirely beside and beyond the mark. Man's habits and life are entirely different from the existence pursued by the animals named. The cow-parallel, it may be further urged, is inadmissible, since man does not, like that worthy and useful beast, "chew the cud"—an operation probably necessitating a period of rest from active exertion after food. If we admit that the after-dinner hour of animals is spent in somnolence—in the case of the boa-constrictor it is spent in a sleep which lasts for weeks—that fact is no argument for human "sloth and slumber" after meals. Man is neither a domesticated baboon nor a caged hyæna, still less does he resemble the big snake in the matter of his food habits; seeing that while the boa-constrictor is a cold-blooded, inert animal, dining, say, once in six weeks, man is an active warm-blooded mammal, requiring food at frequent intervals, and exhibiting habits which place him, in one sense at least, in a different world from his lower neighbours.

So far animal parallels clearly fail; and, in truth, it is manifestly absurd to introduce them where a question of human habits has to be considered. That which remains for consideration is the question how far, in reference to strictly human (and civilized) habits, is the after-dinner nap a justifiable procedure?

If we appeal to physiology we may gain at least a basis of certitude for our further investigations. In the course of digestion, it is true, there is a general determination of blood (and, therefore, of heat) from the external surfaces towards the internal parts. This is readily explicable when the mechanism of digestion is understood. A large portion of the digestive process consists in the manufacture (or *secretion*, as it is named in science) of fluids designed to act on the food as it passes along the digestive tube. Thus the stomach has to secrete gastric juice; the salivary glands require to manufacture saliva in increased quantity: the sweet-bread is ordered by the Draconian laws of life to prepare for duty by making pancreatic juice; and the liver, in its turn, is stimulated to additional activity. Now all this process of manufacture of digestive juices demands an increased supply of blood. Hence in each digestive organ such an increase of blood-supply takes place. The equilibrium of the circulation, so to speak, undergoes a disturbance, and the outer parts of the body suffer physiological depletion while digestion is proceeding.

It is in this clear fashion that we account for the feeling of chill which is often present after meal-times, and it is similarly on this account that we discover the wisdom of the advice which suggests that exposure to a lowered temperature after food, is, in its way, an unhealthy and therefore dangerous procedure. Furthermore, from the brain itself is drawn so much blood. Even while the organ of mind maintains a very constant blood-supply as to quantity at least in our waking hours, there must be a certain difference perceptible while digestion is in the hey-day of its work. Hence on account of this temporary physiological engorgement of internal parts—this digestive congestion, as it might well be termed—the feeling of lethargy, of inaptitude for work, and of languor after meals, is entirely explicable.

Nature's ways and works, as a rule, run in parallel lines. One set of operations subserves a variety of uses and purposes in the living economy. If, as I have shown, it is natural that we should feel disinclined for exertion after dinner (owing to the disturbance of the equilibrium of the blood-circulation), notice the true purport of the arrangement. Digestion is a work occupying, in the case of a full meal, three or four hours, in its earlier stages. It is, moreover, a work which demands a considerable expenditure of nervous force, and of muscular force (in the movements of jaws, stomach, and intestine) as well. We require, in other words, to spend a goodly amount of energy even in the act of repairing the wear and tear of our frame. We "rob Peter to pay Paul" in the mere act of living. Getting and digesting food, by aid of which we repair bodily waste, necessitates the expenditure of much bodily energy. Life is truly, in this sense, a burning of the candle at both ends. Hence, that digestion may proceed uninterruptedly, and that we may not allow active work to interfere with that important process, there supervenes, after a full meal, a natural sense of languor and disinclination for work, due, primarily, as we have seen, to the fact that blood is driven or drawn to the more internal parts, and leaves the brain and surface relatively and temporarily deprived of their full blood-supply.

So far, it might be urged, Dr. Oswald's views find confirmation in physiology. But it is clear that a sense of repletion is not logically synonymous with sleep. The natural rest of the fully-fed man is not to be taken as implying that this rest is to be passed as a period of "gorged somnolence." That it is good to rest after meals, nay, that it is necessary for health that we rest after food, is a paramount law of health-science. The beginnings of dyspepsia are often found in the rush and hurry which succeed food in this modern life of wear and tear. I should, therefore, say to everyone, "rest after meals"; but I emphatically advise no one to sleep after meals, or even to encourage such a habit. If an individual has had his healthy amount of sleep (say, his eight hours) during the night, and his work has made no excessive demands upon him during the day, I fail to see that, because he has taken what in popular language is called "a square meal" at dinner, that it is natural for him immediately thereafter to go to sleep. The error of Dr. Oswald, and those who think with him, consists in their substituting "sleep" for mere "rest." It is not natural that, as the life of man is ordered, he should sleep after dinner. If Dr. Oswald's contentions be correct, we should, for health's sake, arrange to divide our season of sleep into the nocturnal and the diurnal periods—so many hours by night and so many hours (after dinner) by day.

I affirm, in conclusion, that while a sense of languor is natural after dinner, a demand for actual sleep is unnatural. Indeed, in many persons sleep after food is followed by indigestion, and in others by a sense of fulness and discomfort, indicating that digestion has been interfered with by the somnolence. In man, digestion is an act naturally performed during waking, and not during

sleeping hours. I strongly advise those to whom an "after-dinner nap" has become a necessity, to examine carefully into their food-habits, and, more especially, into their drink-habits. The probability is that it is only those who eat (and drink) to repletion, who feel the need for absolute slumber after dinner. The typical dinner is surely not a nutritive prelude to sleep. I can understand a man "loaded up" with food and alcohol, welcoming his couch after dinner. I cannot understand how a rationally-fed human being can sleep after the principal meal of the day. In the latter case, he is a mere over-loaded machine, in whom, let us note, the activity of digestion is liable to be checked by sleep. In the former case, that of the rational man, he is a being who certainly feels disinclined for exertion, but to whom the *siesta* after dinner means conversation, reading, or other means of gathering "the harvest of a quiet eye."

I therefore say to the after-dinner "nappers," look to your food, and especially to the amount of alcohol you consume, and see if, by judicious reform in diet or in drink, you cannot avoid approaching lower life in respect of unnatural torpor after your food. It is certainly by no means a human characteristic to imitate the "restless hyæna" of the menagerie, or the somnolent boa-constrictor, which awakes, in truth, only to devour.

"LIKE BEGETS LIKE."

By Dr. E. J. Dungate.

EIGHTH PAPER.

In *Nature* for Oct. 19, 1876, a correspondent from New Zealand, Mr. T. H. Potts, gives the following: "In a semi-wild state, on a run, horses graze together in large or small companies, which 'station hands' call 'mobs.' These mobs wander at will over a large area of country, finding abundance of good, natural pasture and water. Some years since a mare became solitary in her habits, always seeking one particular creek. Whenever released from work she made off to the favourite feeding ground by herself; if rounded up with a 'mob' she would take the earliest chance that presented itself of reaching her usual haunt. One of her progeny some years afterwards showed a similar liking for solitude; he was placed among several other horses on a small run intersected with bushy gullies, more or less rocky. He was soon missing, and search was made for him for some time without success; he was supposed to have come to grief in the bush. At length he was found, most unexpectedly, on a small patch of pasture between two rocky gullies thickly bushed. This spot was so difficult of access that a slight track had to be cut to get the horse back. Having been brought from a large station, where he was bred and reared, he no longer enjoyed a great range by which he could place any long distance between his companions and himself. He displayed much tact and judgment in the way he secured the indulgence of hereditary habit, by discovering and reaching with difficulty an almost inaccessible solitude."

The strength of habits peculiar to a genus may often be observed. Mr. Broderip, who was one of the founders of the Zoological Society, kept a tame beaver for some time in his library, and he carefully watched its habits. "Binny" was always trying to make a dam across the floor. He used for this purpose walking-sticks, umbrellas, and fire-irons, and he made a hiding-place by means of books, clothes-brushes, and anything else that would answer his end. Many people, too, have noticed that if the young of migratory birds are kept in a cage, when the migratory season approaches they get quite feverish, flap their wings against the cage, and show their distress in various other ways.

Speaking of the transmission of acquired habits, the writer in the *Edinburgh Review*, above referred to, gives the following examples: "English sheep, probably from the greater richness of our pastures, feed very much together; while Scotch sheep are obliged to extend and scatter themselves over the hills, for the better discovery of food. Yet the English sheep, on being transferred to Scotland, *keep their old habit of feeding in a mass*, though so little adapted to their new country. So do their descendants, and the English sheep is not thoroughly naturalized into the necessities of his place *till the third generation*. The same thing may be observed in the nature of his food, that is observed in his mode of seeking it. When turnips were introduced from England into Scotland *it was only the third generation* which heartily adopted this diet, the first having been starved into an acquiescence in it.

M. Roulin and M. Geoffroy St. Hilaire both notice the hereditary transmission of habits, which have been originally impressed by care and art. M. Roulin observed that horses bred on the table-land of the Cordillera were taught a pace which was a sort of amble. This was not natural to them, but they were taught it very early, and great care was taken to prevent them from walking in any other way. Occasionally such horses became lame, and then, if they were well-grown stallions, they were let loose in the pasture grounds. It was noticed that these horses became the sires of others to whom ambling was natural, and who therefore required no teaching.

The tendency to produce milk permanently is hereditary in cows. Anyone who has thought upon the subject must be aware that the constant secretion and enlarged udder have been caused by the habit, through many generations, of drawing milk from the cow long after the time when it was needed by the calf. Owing to several circumstances, the milking of cows was at one time discontinued in Columbia. "In a few generations," says M. Roulin, "the natural structure of parts, and withal the natural state of the function, had been restored. The secretion of milk in the cows of this country is only an occasional phenomenon, and contemporary with the actual presence of the calf. If the calf dies, the milk ceases to flow, and it is only by keeping him with his dam by day that an opportunity of obtaining milk from cows by night can be found."

Just as warts, and scars, and physical disfigurements of other kinds are sometimes transmitted from father to son, so the most trifling peculiarities of habit in a father are sometimes repeated in his children. The so-called trifling peculiarities of habit which are recorded as being transmitted are, however, by no means trifling, in so far as they show the strength of hereditary tendency. Darwin mentions an example which he himself had observed. "A boy had the singular habit, when pleased, of moving his fingers parallel to each other, and, when much excited, of raising both hands, with the fingers still moving, to the sides of his face on a level with the eyes; this boy, when almost an old man, could hardly resist the trick when much pleased, but, from its absurdity, concealed it. He had eight children. Of these, a girl, when pleased, at the age of four and a half years, moved her fingers in exactly the same way, and what is still odder, when much excited she raised both her hands, with the fingers still moving, to the sides of her face, as her father had done, and some-

times even continued to do when alone." Another instance is quoted from a French author by several writers upon this subject. A father was in the habit of sleeping upon his back, with the right leg crossed over the left. His daughter, when an infant in the cradle, was noticed to assume exactly the same position, and this habit she continued, although means were employed to cure her.

A peculiar hereditary trait is described by Galton. A gentleman was in the habit, when he lay asleep on his back, of lifting his right arm gradually towards his forehead, and then allowing his hand to fall, so that his wrist struck the bridge of his nose. This was only done occasionally, but sometimes, from no apparent cause, it was repeated, until his nose was quite sore. His wife had to remove the button from the wrist of his shirt, on account of the scratches which it made. His son married a lady who had never been told of this peculiarity, and she noticed the same strange trick on the part of her husband. His daughter inherited it, and performed it, like her father and grandfather, with the right hand, but with the difference that she allowed the palm of her hand to strike her nose, so that she did herself no injury. Dr. Holmes says, "This boy sits with his legs crossed, just as his uncle, whom he never saw, used to sit; his grandfathers both died before he was born, but he has the movement of the eyebrows which we remember in one of them and the gusty temper of the other."

Left-handedness is sometimes a family peculiarity. The left-handed men of the tribe of Benjamin probably derived their peculiarity from a left-handed ancestor. M. Girou gives an example of this peculiarity. G. was born of a family where the use of the left hand was hereditary; he was not left-handed himself, but he had a married daughter who was so, and all of her children were so likewise. His son, who was married, was not left-handed, but he had a little daughter in the cradle who was so to a marked extent.

A few remarks on left-handedness may be seen in the *Lancet* for November 5, 1870. A surgeon, speaking of hereditary predisposition to left-handedness, says, "As a proof of this hereditary predisposition, I have only to refer to my own family, where the eldest son for three generations at least has been left-handed—viz., my paternal grandfather, my father, and myself; and, as a curious circumstance, I may just mention the fact that the first-mentioned was the best marksman in his part of the country, although he fired from the *left* shoulder, as I do myself. I have been told that my left hand was strapped up for weeks at a time when a child, in order to overcome the natural or hereditary tendency; and I can well remember feats of caligraphy which I accomplished in my earlier school days which were entirely written with the left hand. Physical education has, however, rendered me somewhat ambidextrous, although the left predominates now, which I may exemplify by stating that in cricketing I invariably bowl with the *left* hand, and 'hit' with the right. . . . I have found this double-handed condition of the utmost utility in midwifery and surgery."

The inheritance of peculiarities in the voice has been frequently observed, and also occasionally the heritage of loquacity. Dr. Elam says, "Children born of very talkative parents are usually so themselves—they talk for the sake of talking, apparently moved by an elastic impulse that they cannot control." Lucas tells of a servant girl who talked incessantly, either to herself or to others, and when her master found it necessary to dismiss her, she said, "Mais, monsieur, ce n'est pas ma faute, ce n'est pas ma faute: cela me vient de mon père, dont le même défaut désespérait ma mère, et il avait un frère qui était comme moi."*

All men who have thought upon the subject of heredity are convinced that qualities of mind, as well as those of body, are derived by hereditary transmission. D'Israeli says, "There are hereditary vices and infirmities transmitted from the parent's mind, as there are unquestionably such diseases of the body: the son of a father of a hot and irritable temperament inherits the same quickness and warmth; a daughter is often a counterpart of her mother." Horace says in Ode IV.:—

"Fortes creantur fortibus, et bonis
Est in juvencis est in equis patrum
Virtus, nec imbellem feroces
Progenerant aquilæ columbam."†

WHAT AILS THE MODERN GIRL.—A writer in *Harper's Bazaar* makes a pretty close diagnosis for a layman as to what ails the modern girl, at least a good many of her. It is well deserving of record as an *indicatio causalis* in the disease which is so often the despair of the doctor. "The modern girl hardly knows what she wants, whether it is the higher education, an æsthetic wardrobe, love, or fame. She plays tennis and progressive euchre, and flirts and does Kensington work, and reads Herbert Spencer, and very often writes; she dabbles in music and talks theosophy, and if there are more things in heaven and earth than are dreamed of in her philosophy one questions what they can be. Withal, she is as restless as the wind. She does not love the quiet of home; she lives on excitement; she goes to Europe, to the Springs, the mountains, the theatres, the receptions—if she can get there—or to the modiste; she can always fall back upon clothes as a diversion, and, when everything else fails, she has nervous prostration and a trained nurse. In fact, the chief trouble with the modern girl, be she rich or poor, is that she either does too much, keeps her nerves on the strain, and by and by goes to the other extreme and does literally nothing but consume drugs, talk of her ills, and consult the Christian scientists; or she has no real interests, fritters away her time in shallow pursuits, becomes pessimistic and dyspeptic, dissatisfied with herself and all the world; cries and questions if life is worth living, and feels especially blue on holidays. The remedy for all this is, perhaps, an object in life; those who are well and unselfishly occupied do not question if life is worth living; they know it is; and whether they are busy in the shoe factory, behind a counter, at the fireside, in the kitchen or the dining-room, so long as they are busy and not shirking or reaching forward for something more congenial, and neglecting present duty, their minds are at rest and uninvaded by despondency. One of the best remedies for depression of spirits is the effort to bestow happiness; it has been known to prove effectual when all other methods have failed; when novels and new gowns and cod-liver oil and bovinine and bromide; when admiration and flattery are no more serviceable than an abracadabra or any heathen spell. Melancholy or other ills of this nature are the direct result of a too strong egotism, and an absorbing interest in others is a safe and agreeable medicine, and is usually the last thing a modern girl tries."—*Boston Medical and Surgical Journal.*

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* "But, sir, it is no fault of mine, it is no fault of mine: it comes to me from my father; the same fault in him drove my mother distracted; and one of his brothers was like me."

† "The brave are generated by the brave; and there is in steers, there is in horses, the virtue of their sires; nor do the courageous eagles procreate the unwarlike dove."

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

POINTS ON CONSUMPTION.

One out of every five to seven deaths is from consumption. Were this frightful proportion due to cholera the nation would be in a panic. Probably nothing so truly indicates the exact condition and welfare of the people as the death-rate from consumption. As the ordinary comforts and sanitary conditions wane, this disease increases. And in this connection it cannot but be interesting to note what part heredity plays, and the degree of its infectiveness.

Heredity.

In Williams' Analysis of One Thousand Cases of Consumption, the following conclusions are reached:—

"1. Family predisposition prevails among, and exercises a more decided influence on, females than males, and the former have a greater power of transmission than the latter.

"2. Fathers transmit more frequently to sons, and mothers to daughters, than the converse.

"3. Paternal inheritance, whilst most unfavourable for the males, is less so for females, as it generally includes an increase of resisting power.

"4. Maternal inheritance is unfavourable for both sexes, but most so for the males.

"5. Double heredity exercises the greatest influence, and affects sons more strongly than daughters.

"6. Family predisposition does not directly shorten the duration of the disease.

"7. It precipitates the onset of the disease, and thus shortens the duration of life."

Infectiousness.

The question, Is consumption "catching," is often asked. "Except a few cases of husband and wife infection, and a very few instances of sisters or mothers and daughters sleeping together in an *ill-ventilated bedroom*, apparently contracting disease, I cannot record any infective cases," writes Dr. Williams. He sums up as follows:—

"1. The evidence of large institutions for the treatment of consumption, such as the Brompton Hospital, directly negatives any idea of consumption being a distinctly infective disease, like a zymotic fever.

"2. Consumption is not, in the ordinary sense of the word, an infectious disease; the opportunities for contagion being most numerous, while the example of its action are exceedingly rare; nevertheless its communicability *is possible under extremely favourable circumstances.*

"3. In the rare instances of contagion through inhalation, the conditions appear to have been (1) close intimacy with the patient, such as sleeping in the same bed or room; (2) activity of the tubercular process, either in the way of tuberculosis or of excavation; (3) neglect of proper ventilation of the room.

"4. A husband may, though he rarely does, infect his wife.

"5. Infection through the milk of a tubercular cow, in cases where the udder is affected, is possible.

"6. By the adoption of proper hygienic measures, such as good ventilation, and separation of consumptive from healthy people at night, and by proper care being exercised about the selection of cows for the milk-supply, all danger of infection can easily be obviated."

The Relief of Consumption.

A word or two of quotation may be given under this heading. "Of all means hitherto tried for *the relief of consumption*, unquestionably cod liver oil has been found the most successful. "This I stated," says the same authority, "in 1849, after three years of its use; and so I repeat after a quarter of a century's experience, that it is the only agent deserving the title of a remedy in this disease." Of all forms of oil probably the Kepler solution of cod liver oil is unequalled.

THE MORALITY OF THE BATH.

By Annie J. Miller.

(Concluded.)

Because of dense ignorance concerning the general details and purposes of these baths, there is still an amount of prejudice against them that seems unaccountable in the light of the teachings of the different schools of hydropathy; others are prejudiced because it does not seem quite modest to go to a bath where there is at least the possibility of some personal exposure. Such puerile objections against the enjoyment of a thorough process of purification are but further arguments in favour of the necessity for its universal adoption.

If we could get rid of the morbid belief that modesty and immodesty are states of being instead of action, we should indeed be on the high road to true morality. Is not one member as pure as another unless debased by activity in an unrighteous or impure cause? and does not a mind teeming with unholy images mirror itself upon the soul and become reflected through the speaking organs of the countenance? One meets every day upon the public streets evil eyes and sensual mouths, the sight of which is more degrading than the contemplation of a nude figure in a state of native purity. Moreover, there is no necessity for exposure except to one's own attendant, and nothing could be more stolid than the ministrations of those shampooers with whom we are familiar. Indeed, each person who comes under their busy hands represents just so much surface to be rubbed, sprayed, and treated to fine oils or alcohol, nothing more. Even the sense of connoisseurship in matters of personal development and beauty seems to have been lost through long familiarity with the negative side of human existence; and just as in certain countries, nudity being the custom, no flavour of curiosity or sentiment is aroused by the human form, so in the Turkish baths one may be sure that he or she passes almost unobserved and unrecognized by the attendants unless remembered for some special kindness or generous fee.

The very arguments used by ladies of the higher social circles in defence of their *decolleté* dresses for the drawing-room and opera hold good in the bath. A woman may even clothe herself in her sheet quite picturesquely and without any sense of personal impropriety. Upon leaving the hot room the attendant takes one into a private apartment, where, stretched at full length upon a marble slab, the work of purification is begun; the skin, softened by the heat, is rubbed until nothing remains which can be removed by such a process. Then follows the general soaping, and afterward the spraying and drying of the skin. This over, one is put to rest on a couch, and when the body has returned to its normal temperature, oil or alcohol, if one chooses, is used to anoint and prevent the possible tendency of taking cold. In some of the more luxurious and magnificent of the baths manicures, chiropodists, and hairdressers are

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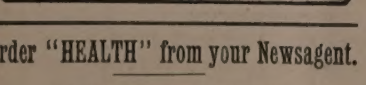

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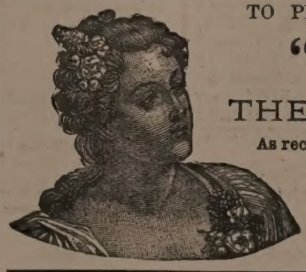

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at hand to assist in completing the toilet, so that nothing essential to or consistent with the desire to preserve and beautify is wanting. The Turkish bath should be taken once a week, and the sun bath daily. The Turkish bath should be taken for cleanliness and to eradicate impurities; the sun bath to strengthen and tone up the system, and give that magnetic power which is a moving and controlling force in the world.

So much for the Turkish bath in our own country and times. The real Turkish bath, as enjoyed by the women of the harem, may be more luxurious and elegant in its appointments, and the beneficial effects are doubtless more widely recognized among the dwellers in the Orient than with ourselves. But the habits of life among the Turks are enervating and indolent to an extent which we scarcely conceive, and the bath is the only counteractant. In the bath the women become animated, and splash and plunge in the basin with the recklessness and abandon of children at play. There is, too, far more ceremony to the Turkish bath as taken by the Turkish women, and where with ourselves the bath takes from one and a half hours to three, with the Turkish women it is a matter of several hours longer.

In Turkey every well-to-do person has a private bath, and these baths are very magnificent in some cases, notably the baths at Dolme-baktchee, on the Bosphorus, which are quite beyond imagination to picture.

But the custom of going to the public baths is quite common among Turkish women, for there they meet, as Western women meet in the drawing-room, for a social gossip. The ladies come into the bath attended by their servants, who bring the bathing wraps and lunch-baskets, while the eunuchs remain outside, or go away and return when the bath is over. While in the hot room the ladies of the harem wear their drapery, but once in the shampooing-room they throw it aside, and without a thought of immodesty, or a care, they give themselves up to the delicious enjoyment of the hour. Each lady has two attendants, who lather her with a clay known as *pilo*, and afterward knead and rub and pour hot water over her, until she looks like a spirit of the water.

These Turkish women, as a matter of course, have natural figures, plump and finely developed. After the bath comes a cigarette and coffee, when the ladies are taken in charge by their beautifiers, who adjust the hair, paint the complexion, and dye the eyebrows and eyelashes with kohl to enhance the size and brilliancy of the eyes. Seen through her veil a Turkish woman is radiantly beautiful, but the veil is needed to soften and give delicacy to the lavish use of cosmetics and paints, and a stranger permitted to see these famous beauties without their artificials, would find them no handsomer in point of colouring than many women less noted for beauty.

But one turns from the physical beauty of the women of the harem, from the well-fed and care-free lives that they lead, to the plodding and unrestful existence of the average Western woman, with her hurry and flurry and "no time" to devote to pure repose and luxuriousness, glad, after all, to live under a civilized *régime* instead of within the walls of the harem; glad to walk as a free woman at man's side, his beloved companion and friend instead of the slave of his passions, or the toy of his fancy.—*Dress.*

Magistrate — "Have you no written document to prove that your wife is really dead?" Peasant—"I have the doctor's bill."

The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

FASHION AND DEFORMITY IN THE FEET.

By Ada H. Kepley.

FIRST PAPER.

"A WELL-FORMED foot," says Chapman in "The American Drawing-Book," "is rarely to be met with in our day, from the lamentable distortion it is doomed to endure by the fashion of our shoes and boots. Instead of being allowed the same freedom as the fingers to exercise the purposes for which Nature intended them, the toes are cramped together, and are of little more value than if they were all in one; their joints enlarged, stiffened, and distorted, forced and packed together, often overlapping one another in sad confusion, and wantonly placed beyond the power of service. As for the little toe and its neighbour, in a shoe-deformed foot, they are usually thrust out of the way altogether, as if considered supernumerary and useless, while all the work is thrown upon the great toe, although that too is scarcely allowed working-room in its prison-house of leather. It is, therefore, hopeless to look for a foot that has grown under the restraints of leather for perfection of form, and hence the feet of children, although less marked in their external anatomical development, present the best models for the study and exercise of the pupil in drawing."

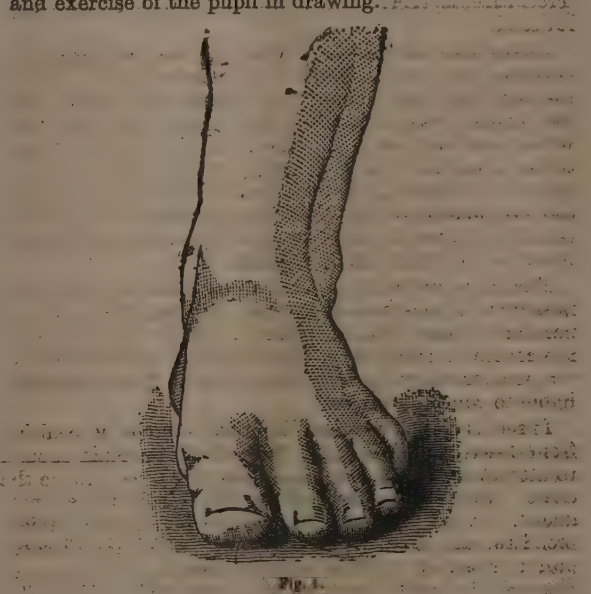

Fig. 1.

Camper, who wrote, in the seventeenth century, "On the Best Form of Shoe," says that his treatise originated in a jest made with his pupils, who "did not believe I should dare to make public a work on such a subject," which indicates the small estimate that was put upon the foot as an organ of the body. He begins by deploring the perversity which wholly neglects the human feet, while forcing the greatest attention to the feet of "horses, mules, oxen, and other animals of burden," and declares that from the earliest infancy the foot-coverings worn serve but to deform them, and make walking painful, and sometimes impossible, and he lays the blame on the ignorance of shoemakers.

James Dowie, a practical and scientific Scotch shoemaker, in his excellent little book, makes the same statements as the artist; and the great Dutch surgeon, whose treatise he had translated into the English language, also laments that the subject of the feet is so neglected by those who are competent to instruct us about them. Lord Palmerston said to Dowie that "shoemakers should all be treated like pirates, put to death without trial or mercy, as they had inflicted more suffering on mankind than any class he knew."

One cannot treat of the deformities of the feet without considering the nature of their covering, the boots and shoes, for it is these which cramp, distort, and disable them; therefore in this article, after a brief account of the anatomy of the foot, our attention will be confined to its principal distortions and the causes which produce them.

The feet furnish a firm base for the body in standing, and, undeformed, make walking easy and healthful. They sustain alternately the whole of the body's weight, and, though comparatively small, are admirably fitted to carry it without jar or discomfort, if unhampered by their coverings. They are in the highest degree elastic, from the large number of bones, with many articulations, with their attachments, and the plentiful supply of muscles, blood-vessels, and nerves to keep them vigorous and well-nourished. This elasticity enables them to carry the body over smooth and rough surfaces, not only without injury, but to its greater health. In just so far as this elasticity and freedom of natural action are interfered with, is their health, and with it that of the body, lowered.

Anatomists divide the skeleton of the foot into three portions, the tarsus (ankle), with seven bones, forming the heel and arch bones; the metatarsus (instep), with five bones, just forward of the tarsus; and the toes, which contain fourteen bones, two in the great toe, three in each of the other toes; beneath the ball of the foot, as it is called, are two small bones, which lie under the articulation of the great toe and the adjoining metatarsal bones, making twenty-eight bones in each foot (see Figs. 16, 17, 19, in future papers).

The large articulating surface of the feet, and their numerous blood-vessels, muscles, nerves, &c., render it peculiarly susceptible to injuries. Their distance from the centre of circulation, together with the variations of temperature they have to endure, make them extremely liable to contract disease.

It seems as if the general injuries to the body resulting from diseased and crippled feet should be plain enough to attract attention, but such does not appear to be the case. No complete treatise on the feet has been produced. Physicians as a class seem to pay the subject but little attention. In the books in which the diseases and injuries of the feet are considered, the causes of disease, if stated, seem to be mentioned incidentally, and without proper notice of the connection between the diseases and the bad physiological conditions they induce. Physicians will prescribe for diseases caused largely by unsuitable clothing of the feet, without saying anything of the reform in the *chaussure* by means of which the disorder might be greatly mitigated, if not cured. A delicate woman was treated for months for a peculiar disease which made her a complete invalid, by an eminent specialist, who said nothing of the high-heeled, paper-soled, thin boots, the habitual wearing of which greatly aggravated her disorder. A paper showing the deleterious effects of such shoes on the health of women, read at a recent meeting of an association of doctors,

Fig. 2.

seemed, according to the reports, to call out more objectors than it found friends. A competent woman physician excused herself for wearing such shoes because it was so hard to find hygienic shoes in stock, and added that, when physicians prescribed reforms in clothing, they had to be politic, to keep their patients; and when asked if she ever saw a woman who wore tight shoes, replied "No," nor did she know any who wore tight corsets.

Walking is the exercise that, more than any other, brings every portion of the system into healthful activity. Many complaints would disappear under a thorough and careful course of pedestrianism; but who can walk if the feet are sore or diseased? General bad conditions arise from lack of exercise, which invigorates the muscles and oxygenizes the vital fluid. Dyspepsia is the usual attendant on such conditions, and may manifest itself either by general emaciation or by fatty degeneration.

The feet demand a covering which shall conform to their shape, allow them free play, and afford protection from injuries.* Dowie scoffingly remarks in his treatise respecting shoes so cut at the toes as to represent the foot like that of a goose, with the great toe in the middle. We are now in an era of "pencil-toed" shoes, so called, which recall Dowie's comparison. It is difficult to understand how shoemakers can be so careless of the shape of the feet and their needs as to cut shoes that in the toe are the very reverse of what toes demand; but it is more difficult to conceive how anyone can endure the suffering they inflict. Dowie insists that tight-toed stockings are injurious to the feet, and recommends that they be woven with a separate covering for each toe, as gloves are made with fingers.

Fig. 1 is a foot copied from the antique, and shows "beauty of form and proportion, ease and elasticity of motion, as well as an admirable expression of adaptation and power for use throughout."

Fig. 2 shows the distorted foot of a Chinese woman, photographed from nature.

Fig. 3 represents the sole of a normal human foot. The dotted line shows how the foot is usually cramped in the shoe-sole. The heel of the foot is narrow, the anterior portion broad, the toes are nearly parallel to a line "C," drawn through the centre of the sole from heel to toe. The line A B is drawn through the centre of the instep, or great arch of the foot, and bisects the great toe. It is this arch which mainly supports the weight of the body; the heel forms one of its piers, the great toe the other. One may easily see that when the great toe is drawn from its line with the arch, as indicated by the dotted lines, the stability of the body is by so much destroyed; and when the heel is taken from its level with the bulk of the foot, by a high heel, yet more is the stability of the body destroyed. Erichson says,

* The Indian moccasin is probably the easiest and most comfortable foot-covering worn, as it adapts itself perfectly to the shape and motion of the foot.

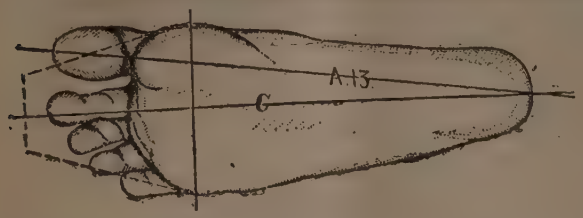

Fig. 3.

"Firmness of gait is caused by the foot resting on the heel behind and the ball in front, and principally by the foot resting on the broad line formed by the great toe and the breadth of the fore part of the foot."

The dotted lines in Fig. 3 show the outlines of a quite liberal sole. It is easy to see how an ordinary foot would be cramped if confined within its limits.

Fig. 4 shows a very common shape of the foot, produced by cramping and crowding the toes. Many persons have only to look at their own feet to see fine specimens of this sort.

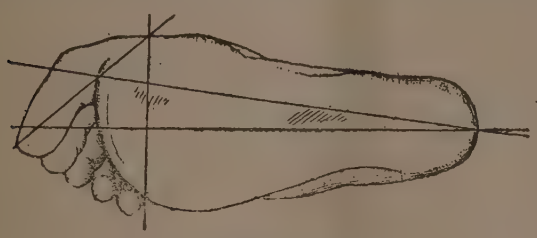

Fig. 4.

Galen was born in Pergamos, A.D. 131. His father was a man of profound learning, and placed his son at an early age under the instruction of the most learned teacher of his day. When Galen was seventeen years old, his father had a dream, in which he claims that it was revealed to him that his son should adopt the profession of medicine.

Burley's Tooth Preparations.—Mr. W. Burley, of 137, George-street, Edinburgh, sends us samples of his "Tooth Soap" and "Fragrant Pyrethrine"—the latter intended for use as a mouth wash. Of both preparations we are able to speak in terms of the highest praise. The Tooth Soap is compounded on scientific principles, and contains antiseptic substances which prevent tooth-decay and tend to assure the cleanliness and health of the teeth. The "Fragrant Pyrethrine," as its name indicates, is an admirable mouth wash, the use of which aids the effect of the Tooth Soap in preserving the teeth and in sweetening the breath. Smokers will find this mouth wash an agreeable means of removing the tobacco odour, while for the relief of tender gums it is also well suited.

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HOW TO DRESS IN HOT WEATHER.

Dr. Edson says it is best to wear dark clothing in summer, because black radiates heat more freely than white, and says that animals living in the Arctic regions are white, because that colour holds the bodily heat. Dr. Parker, on the other hand, gives the usual opinion that light-coloured clothing is best in hot weather. Dr. Parker is right and Dr. Edson is wrong.

The experiments of Coulier ("Expériences sur les étoffes qui servent à confectionner les vêtements Militaires, Jour. de la Physiologie, 1858,") show that the difference of absorption and radiation between different colors of the same stuff are not perceptible in the shade at temperatures between 70° and 100° Fah., while the white is much less absorbent than the black when exposed to the rays of the sun.

Dr. Edson's theory of the cause of the white colour of animals in the Arctic regions, which we suppose he would extend to explain why the black races are found in the tropics, is one that is not in the least tenable.

The great point to be kept in view in selecting clothing for hot weather is, not so much to provide for the hottest part of the day as for the evening when the temperature falls, and when cotton gauze underclothing is likely to lead to chilling the surface and to lay the foundation for rheumatic neuralgias of various kinds.

Thin woollen underclothing and light coloured cotton stuffs for outer wear during the middle of the day are the best. The clothing should be loose to allow free circulation of air and evaporation from the skin. Tights are hot, though they may look cool on the stage.—*Sanitary Engineer.*

REMEDIES FOR INSECT BITES.

Dr. Mylius recommends pencils made of carbonate of ammonium, camphor, and boric acid. The source from which we take this does not give the proportions; but since the ammonium salt is the chief active constituent, it should be present in largest quantity. The camphor acts as an anodyne, the ammonia neutralizes the acid of the insect bite, and the boric acid acts as a disinfectant. The ingredients may be mixed, perhaps, in the following proportion: Ammonium carbonate, ninety parts; camphor, two; boric acid, eight. As a binding material, a dilute mucilage may be employed.

Bernbeck recommends a solution of salicylic acid, one part; flexible collodion, nineteen. This is reported to be even more effective than the ammonia treatment. The same author also recommends a mixture of corrosive sublimate, one part; flexible collodion, one thousand.

Other mixtures besides those above-mentioned have also been proposed or used. So, for instance, a mixture of carbonate of ammonium, camphor, and menthol, or naphthalin in place of either the camphor or menthol.

Such pencils, put up in a neat case, and occupying not more space than an ordinary short lead pencil, would be a useful article for sale by druggists during the gnat season.

Smokers of tobacco, and especially those who desire to prolong their days, will do well to attend to some advice which has recently been given by the celebrated expert, Dr. Favarger, at Vienna, on the occasion of the death of an inveterate lover of the weed. Says the doctor: "Never smoke on an empty stomach. Do not hold the pipe or cigar continuously in the mouth. Never smoke a foul pipe. And drink coffee when smoking.

Popular Science Papers

"Blessings on Science! When the Earth seemed old,
When Faith grew doting, and our reason cold,
'Twas she discovered that the world was young,
And taught a language to its lisping tongue."
—*Charles Mackay.*

A CURIOUS CASE.

The recently issued report of the Perkins Institution for the Blind, where Laura Bridgman has spent fifty years of her life, adds another most interesting and promising record to the accounts of persons afflicted with this double infirmity. The number of persons deprived of both sight and hearing is larger than is commonly supposed, and gives no sanction to the common belief that the loss of one sense insures an unusually strong development of the others. From a psychological point of view, the value of such cases depends, first and chiefly, on the age at which the senses were lost, those cases being the most suggestive and valuable in which the loss is earliest; secondly, upon the degree of blindness and deafness, as well as the rapidity with which these senses lose their function, the most instructive inferences being deducible from cases in which the loss is total; and, thirdly, from the completeness and accuracy of the record of the person's capabilities and achievements at the various periods of life, and especially during early childhood.

In all these respects the case of Laura Bridgman is a most phenomenal one. Her life-history is to the psychologist most fruitful of hints and suggestions, throwing clear light upon questions otherwise difficult of approach. It is an experiment of nature, and as rightfully gets the eager eyes of the psychological student turned towards it, as the transit of Venus attracts the gaze of every astronomer's telescope. The majority of cases of deafness combined with blindness, however, do not belong to this category. In many instances enough remains of hearing or sight, or both, to allow these to enter as a factor in the mental development of the individual, and to that extent to vitiate the exclusive inference as to the *rôles* that these senses play in the psychic life. Often, too, though sight and hearing are practically totally lost, the loss occurred at a period of life when the mind has begun to profit by the experience which these senses collect, and can for many years feed upon the material thus brought together. This independence of the intellectual centres from their food-supply of sensations after a certain age—the fifth to the seventh year for sight—has been proved by actual observation. The report above referred to mentions that there are between thirty and thirty-five blind deaf-mutes in Sweden, where a benevolent lady has organized a school for such defections, and not less than forty such in this country. Eight of these are mentioned by name; but in only two of these cases is the age mentioned at which the loss of the senses occurred—the one at eleven years the other at seven, but with enough sight remaining to distinguish colour—and in both these, as well as in a third case, hearing was not lost until the power of speech had been permanently acquired. But of all these cases, hardly excepting that of Laura Bridgman, that of Helen Keller deserves the most minute and careful study. A *résumé* of the facts concerning her condition, collected by Mr. Anagnos, the director of the Perkins Institute, cannot fail to be of interest.

Helen is the daughter of cultured and well-to-do parents, and was born in Alabama on June 27, 1880. When about nineteen months old, she was attacked violently with congestion of the stomach; and to the effects of this disease are referred her total loss of sight and hearing. Previously she is said to have been of perfect health, and unusually bright and active. She had learned to walk, and was fast learning to talk. The loss of her senses thus took place about seven months earlier than in the case of Laura Bridgman, though Helen seems to have been as much if not more developed at nineteen months than was the latter at twenty-six months. In both cases a slow recovery was made, and a painful inflammation of the eyes set in. It is recorded of Helen that she "soon ceased to talk, because she had ceased to hear any sound."

As her strength returned, she gave ample evidence of the soundness of her mental faculties. She learned to distinguish the different members of her family and her friends by feeling their features, and took an especial interest in the affairs of the household. The little hands were constantly busy in feeling objects and detecting the movements of those about her. She began to imitate these motions, and thus learned to express her wants and meaning by signs, to a remarkable degree. Just before completing her seventh year, a skilful teacher from the Perkins Institute—Miss Sullivan—was engaged for her. At this age Helen is described as a "bright, active, well-grown girl," "quick and graceful in her movements, having fortunately not acquired any of those nervous habits so common among the blind. She has a merry laugh, and is fond of romping with other children. Indeed, she is never sad, but has the gaiety which belongs to her age and temperament. When alone she is restless, and always flits from place to place as if searching for something or somebody."

Her sense of touch is developed to an unusual degree, and enables her to recognize her associates upon the slightest contact. Her sense of smell is very acute, enabling her to separate her own clothes from those of others; and her sense of taste is equally sound. In this respect she has an advantage over Laura Bridgman, in whom both these senses were reduced almost to extinction. She speedily learned to be neat and orderly about her person, and correct in her deportment. The first lesson is an interesting epoch. A doll had been sent Helen from Boston; and when she had made a satisfactory exploration of it, and was sitting quietly holding it, Miss Sullivan took Helen's hand and passed it over the doll; she then made the letters d-o-l-l in the finger-alphabet while Helen held her hand. "I began to make the letters a second time. She immediately dropped the doll, and followed the motions of my fingers with one hand, while she repeated the letters with the other. She next tried to spell the word without assistance, though rather awkwardly. She did not give the double *l*, and so I spelled the word once more, laying stress on the repeated letter. She then spelled 'doll' correctly. This process was repeated with other words, and Helen soon learned six words—'doll,' 'hat,' 'mug,' 'pin,' 'cup,' 'ball.' When given one of these objects she would spell its name, but it was more than a week before she understood that all things were thus identified." In a surprisingly short time Helen completely mastered the notion that objects had names, and that the finger-alphabet opened up to her a rich avenue of knowledge. Everything had to be named, and she seemed to remember difficult combinations of letters, such as "heliotrope" and "chrysanthemum," quite as readily and securely as shorter words.

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Jottings from the Journals

" Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

The Cause of Character.—If a white man marries a negro, their children, boys and girls alike, are all mulattoes. Let us make to ourselves no illusions or mistakes upon this score: each one is simply and solely a pure mulatto, exactly half-way in colour, feature, hair, and stature between his father's race and his mother's. People who have not lived in a mixed community of blacks and whites often ignore or misunderstand this fundamental fact of hereditary philosophy; they imagine that one of the children of such a marriage may be light brown, and another dark brown; one almost white, and one almost black; that the resulting strains may, to a great extent, be mingled indefinitely and in varying proportions, Not a bit of it. A mulatto is a mulatto, and a quadroon is a quadroon, with just one half and one fourth of negro blood respectively; and anybody who has once lived in an ex-slave-owning country can pick out the proportion of black or white elements in any particular brown person he meets with as much accuracy as the stud-book shows in recording the pedigree of famous race-horses. Black and white produce mulattoes—all mulattoes alike, to a shade of identity; mulatto and white produce quadroon—all quadroon, and no mistake about it; mulatto and black produce sambo; quadroon and white give us octoroon; and so forth *ad infinitum*. After the third cross persistently in either direction, the strain of which less than one eighth persists becomes at last practically indistinguishable, and the child is " white by law," or " black by law," as the case may be, without the faintest mark of its slight opposite intermixture. I speak here of facts which I have carefully examined at first hand; all the nonsensical talk about finger-nails and knuckles, and persistence of the negro type for ever, is pure, unmitigated, slave-owning prejudice. The child of an octoroon by a white man is simply white; and no acuteness on earth, no scrutiny conceivable, would ever discover the one-sixteenth share of black blood by any possible test save documentary evidence. Here, then, we have a clear, physical, and almost mathematically demonstrable case, showing that, so far as regards bodily peculiarities, at least, the child is on the average just equally compounded of traits derived from both its parents. Among hundreds and hundreds of mulatto and quadroon children whom I have observed, I have never known a single genuine instance to the contrary. Heredity comes out exactly true; you get just as much of each colour in every case as you would naturally expect to do from a mixture of given proportions. In other words, all mulattoes are recognizably different from all quadroons, and all quadroons from all octoroons or all sambos. — *Cornhill Magazine.*

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The American Girl.—If the American girl is too self-assertive, she is seldom " missish " or " sentimental "; " fast," in the English sense, rarely. It is very unusual to find in American society the girl who whistles, cuts her hair short, dresses like a boy, smokes cigarettes, and otherwise apes the brother; and, in the same way, the youth with outrageous neckties who sucks the handle of his cane at street corners and wears an eye-glass is seldom met with. Boys and girls alike are more independent, more dignified, and more self-satisfied than those of England. Little is done for effect, and none of those weaknesses are apparent which necessarily crop up where the effort to win the approbation of others is a motive of conduct. An affected girl is rarely met with in American society, as rarely as a sheepish boy. But consideration for the feelings of others is not a marked characteristic of American youth, and both boys and girls are inclined to express opinions and make personal remarks which are often remarkably objectionable. But, objectionable as they are, they have, at least, the merit of being candid. Want of respect for the opinions of older people leads to entire freedom of conduct and there is little temptation to deceit. Somewhat strangely, the mothers of America appear to influence their children less than the father, for the reason, probably, that they devote themselves so greatly to their service, and do not exact as much consideration from them as English mothers do. Young girls are allowed a liberty of action which, if they were not essentially modest, would have deplorable results, and which is indeed considered by more thoughtful Americans a little in excess of what is desirable. Yet, freely as they go about, universally as they travel alike in town and country, it is rare to meet with giggling, affected, notice-loving vulgarity, which is too often afforded in English railway carriages and omnibuses. Independence has laid a foundation of self-respect; and, accustomed to rely upon themselves, the girls of America accept courtesy and attention without absolutely requiring it, and are as independent of help as they are of flattery. If the shy, retiring sweetness of the modest English girl is wanting, there is a great charm in the bright, eager, wide-awake intelligence of the American girl, ready with a response to every attack, thoroughly at home wherever fate may place her, and, in spite of somewhat brusque assurance, a lady at heart. —*Home Knowledge.*

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Fruit as Food.—A medical contemporary has published some remarks on this subject which, though devoid of novelty, nevertheless bear repetition. It says that, taken in the morning, fruit is as helpful to digestion as it is refreshing. The newly-awakened function finds in it an object of such light labour as will exercise without seriously taxing its energies, and the tissues of the stomach acquire, at little cost, a gain of nourishment which will sustain those energies in later and more serious operations. It is an excellent plan, with this object in view, to add a little bread to the fruit eaten. While admitting its possession of these valuable qualities, however, and while also agreeing with those who maintain that in summer, when the body is, at all events in many cases, less actively employed than usual, meat may be less and fruit or vegetables more freely used as a food, we are not prepared to allow that even then an exclusively vegetarian regimen is that most generally advisable. Meat provides us with a means of obtaining albuminoid material, which is indispensable, in its most easily assimilable form. It affords us in this material, not only an important constituent of tissue-growth, but a potent excitant of the whole process of nutrition. It has, therefore, a real, definite, and great value in the ordinary diet of man, and the wholesomeness of fruit, combined with farinaceous food as an alternative dietary, is not so much an argument in favour of the vegetarian principle as a proof that seasonable changes in food-supply are helpful to the digestive processes and to nutritive changes in the tissues generally.—*The Dietetic Gazette.*

In less than two months she learned three hundred words, and in about four months she had acquired six hundred and twenty-five words — a truly remarkable achievement. She still used her gesture-signs; but, as her knowledge of words increased, the former fell into disuse. Next, verbs were taught her, beginning with such as Helen herself could act, as "sit," "stand," "shut," "open," &c. Prepositions were similarly mastered. Helen was placed *in* the wardrobe, and the sentence was spelled out to her. "Box is *on* table," "Mildred is *in* crib," are sentences which she constructed after little more than a month's instruction. Adjectives were skilfully introduced by an object-lesson upon a large, soft worsted ball and a bullet. Helen felt the difference in size at once. "Taking the bullet, she made her habitual sign for 'small,' that is, by pinching a little bit of the skin of one hand. Then she took the other ball, and made her sign for 'large' by spreading both hands over it. I substituted the adjectives 'large' and 'small' for these signs. Then her attention was called to the hardness of the one ball and the softness of the other; and so she learned 'soft' and 'hard.' A few minutes afterwards she felt her little sister's head, and said to her mother, 'Mildred's head is small and hard.'" Even so arbitrary elements of language as the auxiliary "will" and the conjunction "and" were learned before two months of instruction had passed, and on May 1 she formed the sentence, "Give Helen key, and Helen will open door."

From this step to reading the raised type of the blind was an easy one. "Incredible as it may seem, she learned all the letters, both capital and small, in one day. Next I turned to the first page of the 'Primer,' and made her touch the word 'cat,' spelling it on my fingers at the same time. Instantly she caught the idea, and asked me to find 'dog,' and many other words. Indeed, she was much displeased because I could not find her name in the book." She soon added writing to her accomplishments, and carefully formed the letters upon the grooved boards used by the blind. On the 12th July she wrote her first letter, beginning thus: "Helen will write mother letter papa did give Helen medicine Mildred will sit in swing Mildred will kiss Helen teacher did give Helen peach," &c. This well justifies the statement that she acquired more in four months than did Laura Bridgman in two years.

Letter-writing is quite a passion with her, and, as she is also able to write by the Braille system, she has the pleasure of being able to read what she has written. Her progress in arithmetic is equally remarkable, going through such exercises as "fifteen threes make forty-five," &c. As examples of her powers of inference, the following will do service: she asked her teacher, "What is Helen made of?" and was answered, "Flesh and blood and bone." When asked what her dog was made of, she answered, after a moment's pause, "Flesh and bone and blood." When asked the same question about her doll, she was puzzled, but at last answered slowly, "Straw." That some of her inferences are not equally happy, the following illustrates: "On being told that she was white, and that one of the servants was black, she concluded that all who occupied a similar menial position were of the same hue; and whenever I asked her the colour of a servant, she would say, 'Black.' When asked the colour of some one whose occupation she did not know, she seemed bewildered, and finally said, 'Blue.'" Her memory is remarkably retentive, and her powers of imitation unusually developed. One of her favourite occupations is to dress herself up—a performance which she accomplishes not always with success according to our ideas. Her progress continues, and each letter is a marked improvement upon its predecessors.

A letter to Mr. Anagnos contains the following sentences: "My doll Nancy is sleeping. She is sick. Mildred is well. Uncle Frank has gone hunting deer. We will have venison for breakfast when he comes home. I did ride in wheel-barrow and teacher did push it," and so on. Enough has been said to indicate the remarkable powers of this unfortunate child, and to give basis for the belief, that if her training is continued in a wise direction, and with a proper appreciation of the value of detailed and accurate investigation, the world will be able to read in the life of Helen Keller a most momentous psychological lesson.—*Science.*

ORIGIN OF A SPECIES.—School teacher to anxious parent: "Your son is bright, intelligent, and getting along well in everything but handwriting." Parent: "That is all right—his writing don't matter; I am going to make a doctor of him."

RATIONAL DRESS. — If persistence in advocating a rational reform in dress were sufficient to bring about a change so desirable, we may well believe that the efforts of medical men in this direction would long ago have been crowned with success. For many years the members of our profession have consistently exposed the ill effects of certain customs in the clothing of both sexes, which, having been introduced without regard to anatomical considerations, are still maintained in daily antagonism to physiological function. Fashion, perhaps, has yielded somewhat to repeated protests, but it still opposes a blind and impassive inertia to the forces of reasonable change. In spite of much remonstrance, in spite of the teaching of chafed feet, crural abscesses, acquired flat-foot, and disease of the tarsal bones, the mischievous high heel is not yet obsolete. The corset—no longer, indeed, so commonly, as at one time, an instrument of torture and a cause of numerous malformations and of actual illness—still continues to deform and injure many weak members of the weaker sex. Nay, there are men, we understand, if that be their true description, who think it advisable to surround the seemly proportions with which nature endowed them with a girdle intended to improve the figure. Even the British workman is liable to err, though from a more practical and more manly motive, in a somewhat similar way. The leather belt with which he frequently braces his middle, and from which he fancies he derives a measure of support in his work, is hardly less objectionable than the corset in compressing the abdominal viscera and retarding the upward course of the venous circulation. Other prevalent habits of minor consequence, but also of injurious tendency, might be referred to, but our space will not now permit. We may, however, note with some satisfaction that there is among some members of the female sex—the chief offenders—an evident desire to abandon the civilized barbarisms in costume which we have ascribed to their sex, and to return to more natural modes. The practice of actual tight lacing, too, is now regarded by women generally with comparative disfavour. The common use of woollen underclothing by both sexes is another change which marks an important stage in the advance of rational ideas, and we may fairly hope and expect that time and increasing experience will bring about yet more reforms in dress of the same salutary kind.—*Lancet.*

Public Health

"Health is the first Wealth."—*Emerson.*

THE MONEY VALUE OF VENTILATION IN WORKSHOPS.

A PAPER on this subject was read by Mr. Joseph Corbett at a recent meeting of the Manchester Association of Engineers, and abstracted as follows in the London *Architect*:—The author maintained that in engineering workshops each man should have at least 25 square feet of floor area and at least 400 cubic feet of space for comfortable ventilation. The quantity of fresh air required per man per hour was not less than 1,000 cubic feet, even in cold weather, and with inactive employment; from four to ten times that amount was required for laborious work in warm weather. In arranging for the ventilation of a workshop, people might take the simple course of making openings in the walls, windows, or roof, the currents in and out of the building depending on the wind and on the rise of temperature. Such means, however, afforded only inadequate and contradictory means of ventilation. With regard to cowls and whirligigs, which depended on the wind for their action, it might be said of them that they were most active when least wanted, and were least active when most wanted; indeed, he thought there were few mechanical appliances by which the public was more humbugged and more completely sold than by the various wind whirligig ventilators which were successfully puffed and advertised by many persons.

After describing, with the aid of diagrams, various methods of ventilation, Mr. Corbett said the best of all known means for inducing and regulating the ventilation of workshops were fans driven by power. In most workshops the power could be given by shafting, or steam could be supplied to a little engine attached to the fan. In some cases it would, he considered, pay well to apply a gas-engine for the purpose, the power required being very small compared with the results attained. Thus, one indicated horse-power would, under favourable conditions, drive 12,000 cubic feet of air per minute, or 720,000 cubic feet per hour, in and out of a workshop, which was equal to the draught of about 200 parlour chimneys, and afforded the minimum ventilation required for 720 workmen.

Even in mild weather, when tenfold ventilation was required, it would serve 72 men. With such a power at hand, there was no excuse for ill-ventilated workshops, for all the risks of back-draught and the irregularities and contrarieties of wind ventilation were overcome by the power fan, which would, by the simple regulation of its speed, give as much or as little air as was required. The fan should be fitted to the outlet, as it was difficult to disperse its violent draught when used on the inlets; and as only one outlet was best for each room, that was the one place for the fan. An outlet shaft would be required, as the fan could not advantageously discharge through a side opening, which might meet the pressure of strong wind at times. Sometimes, where dust had to be kept down, and had to be carried away from lathes, &c., it was convenient to use the space under a boarded ground-floor as the exhaust-chamber leading to the fan, each lathe, &c., having an exhaust-pipe through the floor, and one or more pipes being laid down from near the ceiling to carry off the gas fumes, &c.

In concluding, Mr. Corbett said that by proper attention to health in the workshop, any man now working in an uncomfortable and unhealthy shop might be made at least one per cent. abler, more active, and more efficient in his work. Taking an average workman to be worth £100 a year to his employer, that one per cent. meant £1 per year, or equal to £20 of capital. All that he had suggested would not cost £20 per man, in most shops not £5 per man. He hoped, therefore, that both on the low ground of mere money value and on the high ground of duty to workpeople, his paper would convince employers of the true economy of health in workshops.

THE ancient proverb says: "You cannot get more out of a bottle than you put in it." That's an error. Besides what he put in, he can get a headache, a sick stomach, and perhaps ten days in the lock-up.

CONSERVE YOUR FORCE.—Hamerton says: "It often happens that mere activity is a waste of time, that people that have a morbid habit of being busy are often terrible time-wasters; while, on the contrary, those who are judiciously deliberate, and allow themselves intervals of leisure, see the way before them in those intervals, and save time by the accuracy of their calculation." Another writer, unknown, says: "Some men are in incessant action, early and late, and all through the day. They have no time for family or friends. As for holidays, the less of them the better. They have inherited a nervous temperament, and are doing just the wrong thing with it—allowing it to hurry them to an untimely end. They wear themselves out. Their brain is ever in a state of morbid activity almost like that of an insane man. A little careful planning and a proper laying out of work, and especially doing everything in the proper time, would avoid all such hurry and worry, make work much easier, secure an abundance of leisure, and greatly increase length of life."

A FUNNY ILLUSTRATION OF THE POWER OF THE IMAGINATION.—A short time since a man was taken to one of the Buffalo Hospitals, suffering intense pain. He informed the doctors that his home was down in the country, and explained, as well as his bodily sufferings would permit, that he had swallowed his gold plate containing four teeth while asleep. From hour to hour he grew worse, and examinations failed to locate the swallowed article. When he had been in the hospital about four days it was decided that if relief did not come soon it would be necessary to remove the foreign substance from his stomach with instruments. Finally the the man's sufferings were lessened considerably, and, as a test, it was decided to give him a little piece of beefsteak. This was done and the poor patient was writhing in agony as soon as he had swallowed a mouthful. His sufferings increased to such a degree that he said he knew he would die if the operation were not performed at once. He described minutely the sensations he had experienced as he felt the plate slipping down his throat. Then, placing his hand on his stomach, he groaned forth: "I feel it right here now, doctor." The physicians and nurses could hardly keep him in bed—he suffered so much. Preparations were now made for an operation, and just as the surgeon was about to commence, a telegram was placed in the patient's hand. He tore off the envelope and read aloud as follows: "Found teeth under bed. Come home." The suffering man got up, dressed, and paid his bill. On leaving the hospital this victim of an over-wrought imagination remarked that he could not for the life of him see what the doctors and nurses saw in his case to laugh at.

IMPORTANT ANNOUNCEMENT.

BONUSES TO SUBSCRIBERS TO "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we take the opportunity afforded by the COMMENCEMENT OF A NEW VOLUME to offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer :—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor*.

MOTHER-OF-PEARL IN THE RED SEA.—The mother-of-pearl fisheries of the Red Sea extend the whole length of that water. About three hundred boats are employed by the Arab tribes who are engaged in the work—open, undecked boats, of from eight to twenty tons burden, carrying a large lateen sail, manned by crews of from five to twelve men, and each provided with a number of small canoes. There are two fishing seasons during the year, one of four and one of eight months, during nearly the whole of which the boats keep the sea. Fatal accidents are said to be unknown among the divers, and they are remarkable for their strength and good health. They dive between the ages of ten and forty years, and the practice is said to have no ill-effects. Operations are conducted only in calm weather, when the shell can be discovered by the eye at a depth varying between seven and fifteen fathoms. Of late years, empty petroleum tins, with the ends knocked out and a sheet of glass inserted in one end have been used to assist the eye. The glazed end of the tin is submerged under the sea, when a much clearer and deeper vision is obtained. During the last ten years, the find is said to have diminished, owing to the dearth of shells, from ten to twenty per cent in quantity. Shells brought to Jeddah for sale are disposed of at public auction in heaps of about half a hundredweight each. As preliminary inspection is not allowed, the bidding is purely speculative. The bulk of the shells are now sent to Trieste, a small number to London, and a few to Havre; and some of the finest and largest shells are purchased for exportation to Bethlehem, where they are engraved and sold to pilgrims.

UTILIZING THE TIN CAN.—Probably no one article has been put to such a variety of uses as the tin can. A woman up in Maine has found a new use for them, and she tells, in the *Lewiston Journal*, how those too good to throw away she utilized: "I learned to use them for brown bread when tenting out at the seashore where dishes were scarce and cans plenty, and I liked them so well that I kept up the practice after coming home, especially after finding out that four of them just laid in my steamer. But this is not all the uses I find for them. In a few weeks my kitchen will be decorated with old salt boxes each filled with as many cans, minus the bottoms, as will stand up in it, each can filled with good garden soil and each of these tin pots holding a tomato, dahlia, or other plant. I find it easier to transplant without disturbing the roots when the plants are so treated, and having no bottoms, the cans do not hold water enough to spoil the roots, as might be the case were they used separately. Sometimes I have sunk in the soil in the garden, near a plant that needed a good deal of water, an old can with a hole or two punched in the bottom to help it to leak, and then filled this can with water each night or morning. I also found this a good chance to add fertilizers by putting them in the water. John likes the cans to put around the trunks of young fruit trees. He says he has saved enough trees from the mice in this way to pay for all the canned tomatoes, corn, and peaches we have eaten. He takes off the bottom, cuts open one side, fits them around the stem, and draws the sides together again, and then pushes them down so that an inch or two is below the top of the soil. The pieces of tins straightened out have also done duty as scarecrows, dustpans, and several other things in an emergency."

Our Letter-Box

"Conference [maketh] a ready man. —*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. Those intended for the Publishing Office to be sent to MR. A. P. WATT, THE PUBLISHER, at the same address.

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring

"ELECTRICITY IS LIFE."
(TRADE MARK.)

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FOR the CURE of NERVOUS DISEASES.
HAVE RECEIVED TESTIMONIALS from
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HER MAJESTY the QUEEN,
THE ACADÉMIE DE MÉDECINE of Paris and
FORTY MEMBERS of the
ROYAL COLLEGE of PHYSICIANS of LONDON.

RECENT TESTIMONIALS.

GALVANISM *v.* LUMBAGO.

147, Avenue-Parade, Accrington, May 14th, 1888.

Gentlemen,—It affords me pleasure to bear testimony to the great benefit I have derived from wearing your Galvanic Belt for Lumbago, which I purchased some weeks ago.

I have been a great sufferer, and I could not have believed that so great a change could be effected in so short a time.

My general health is also greatly improved.—Yours truly,

Messrs. Pulvermacher & Co., 194, Regent-street, W. T. SIDGREAVES.

GALVANISM *v.* SCIATICA.

35, George-street, Cathays, Cardiff, May 13th, 1888.

Sir,—Some years ago I bought one of your Galvanic Belts, as I was suffering from Sciatica in a very bad form, and was laid up for about nine months.

I am pleased to say, after wearing your appliance for a short time, I derived great benefit, and ultimately it quite cured me, and I have been able to work ever since.—Yours truly, T. FRY.

Mr J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* INDIGESTION AND NERVOUS DEPRESSION.

Tonypandy, Pontypridd, May 4th, 1888.

Dear Sir,—Some time ago I purchased a combined Belt from you. I was then suffering the miseries of indigestion, and was very weak, depressed, and languid. To eat was a trouble, and to walk two miles wearied me.

After using your Belt for a fortnight or so, the indigestion was almost entirely gone, and my strength and general tone rapidly improved. I then purchased your Battery to use with the Belt, and with very beneficial results.

I can now eat, walk, and work with great freedom; and, by God's blessing, your appliances have certainly wrought a most happy change in me. I confidently recommend your treatment to other sufferers.

Yours very sincerely, (Rev.) F. D. DENT, Wesleyan Minister.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* SLEEPLESSNESS AND NERVOUS EXHAUSTION.

Castle-street, Bolsover, May 1, 1888.

Dear Sir,—I have no hesitation whatever in saying that your treatment has been a great comfort and help to me. I have worn the Belt regularly for some time, and the result has been a marked increase of strength and vitality and I also have enjoyed more natural sleep at nights than for a long period before.—Yours faithfully, L. PARKIN.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* NERVOUS WEAKNESS.

Toulon-vale, Guernsey, 28th April, 1888.

Gentlemen,—I am pleased to say I have derived much benefit from your Galvanic Belt already. My skin is now clear and soft, and my face is quite free from pimples.

My nervousness is very nearly gone and my health and strength is greatly improved.—Yours sincerely, HY. F. GREEN.

Messrs. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* NERVOUS EXHAUSTION.

10, North Parade, Blackpool, April 17th, 1888.

Dear Sir,—I have much pleasure in recommending your Electric Belt, as I have worn one for three months, and have found great benefit from the treatment. I have given your Belt a fair trial, and can safely recommend it to any one.—Yours truly, (Miss) M. A. SLACK.

Mr. J. L. Pulvermacher, 194, Regent-street, W.

GALVANISM *v.* WEAKNESS OF THE BLADDER AND NERVOUS EXHAUSTION.

Northumberland-avenue, W.C., April 14, 1888.

Gentlemen,—I purchased one of your Galvanic Belts some days ago for Weakness of the Bladder and Want of Nerve Power, and find already quite an improvement; but what has surprised me most has been the increased nerve power and vital energy, which from my age I supposed was not possible.

I am quite sure that there is a restorative quality in electricity which can be utilised largely in curing many physical and nervous maladies.

Yours very truly, JAMES MURTON.

Messrs. J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* NERVOUS EXHAUSTION.

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replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules;—

1. All questions are answered free of charge in the columns of HEALTH.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

FRANK JOYCE.—We advise you to try the effect of taking fifteen drops Fer Bravais in water after your meals thrice daily, as you require such a tonic. In addition, wash the affected parts morning and night with Bayley's Soap and tepid water, and dust thereon, after washing, a little of Woolley's Sanitary Rose Powder. Write again if not cured.

VERA.—Try Hastings—the St. Leonard's part—in preference to those places you name in your note. If this is too bracing, then we advise you to visit Bournemouth or the Isle of Wight; but St. Leonards is famous for its suitability for cases like yours. Canterbury is a healthy town; but we should prefer Sydenham for an inland residence.

ZIG-ZAG.—All you name is the consequence of nervousness. Is your system low, and is your occupation sedentary? If so, you must take more open-air exercise, and cultivate your general health thoroughly. Try a teaspoonful of Syrup of the Hypophosphites in water twice daily after your meals, as a suitable tonic.

TAYMOUNT.—We should advise you, first of all, to have your ears thoroughly syringed by a surgeon. What you name is often produced by mere accumulation of wax. Only an examination of the ear could answer your question regarding a recurrence of the former ailment.

ARTIST.—You must submit to some little discomfort if you wish the warts removed. We advise you to touch them daily with tincture of the perchloride of iron.

T. B. B.—Use the hair lotion recommended to "Bax" in HEALTH, No. 265. Keep the hair short; wash it once weekly with Bayley's Spermaceti Soap; and use soft brushes only, and no small or hard combs.

D. T. W.—Use the "Pommade Trichophile" of the French Hygienic Society, 56, Conduit-street, Regent-street, London, W. (advertised in our pages); it is an excellent remedy for scurf. Wash the hair once a week with Bayley's Soap, as ordered to "T. B. B." above.

BOULOGNE-SUR-MER.—Cut the hair short over the parts affected, or shave it away as completely as you can, and apply an ointment, to be compounded as follows: Lanolin, zinc oxide, and vaseline, of each two drachms; resorcin, one drachm. Mix, and label, "Apply night and morning to the part."

E. M. A.—1. We think a mild seaside resort would be most suitable. 2. West or South Coast—East is too bracing for the case. 3. In our judgment the Clyde coast would suit the case, *e.g.*, Rothesay, Innellan, or Dunoon; or, in England, St. Leonards or Bournemouth. If an inland resort, the Lake District might be tried.

M. P. D. (56).—Read the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the advice it gives. The circular you enclose is that of a quack.

LANCASHIRE.—The probability is your vegetarian diet is not agreeing with you. No one diet can possibly suit all persons alike. We advise you to try more generous food, and to increase the amount of flesh-meat you are taking, either in the form of solid meat or strong soups, made with Brand's Beef Essence. For the face eruption locally use the Lanoline Cold Cream, to be had of any druggist, and made by Messrs. Burroughs, Wellcome & Co., Snow Hill, London, E.C. Read also an article in HEALTH, No. 199, on Acne and Blackheads, and how to treat them.

R. ROWED.—Many thanks for your letter.

M. T.—You should try a change of air to the seaside, as such a course often cures cases like yours without other aid. In addition, however, especially if you cannot follow this advice, we recommend you to take internally a dessertspoonful of Thomson's Cod Oil Cream (Dublin-street, Edinburgh) after your meals, thrice daily, as a strengthening measure, and to apply to the interior of the nostrils each night a little pure Lanoline, which any druggist will supply. At bedtime, also, each alternate night, inhale the vapour (by the nostrils) of a pint of hot water to which a teaspoonful of Friar's Balsam has been added. If not cured, write again.

FLORENCE.—1. Try the application of hot dry salt, and take twenty grains bromide of potash in a wineglass of water when the pain is severe. 2. Rest after meals rigorously, as a rule of health, avoid all indigestible foods, and try the powders recommended to "A. W. W." in HEALTH, No. 267.

C. B.—We do not think you need fear such a climate, for although the winters are cold they are very dry.

BRAND.—Follow advice given to "M. T." above regarding the inhalation of Friar's Balsam at night and the Cod Oil after food.

ALPINE.—1. Yes: a good tonic. 2. The pills are highly beneficial for many affections. 3. Not in excess, of course, but a healthy enough beverage, especially if taken with milk.

DEVIL'S CHAIN.—You ask us to do that which is impossible. There is no panacea for the affection you name, and nothing save moral restraint, aided by judicious living (in the way of foods and drinks), can cure the habit. If you say you have no power of moral restraint, we can only advise you to enter a Home such as that at Rickmansworth (described by Dr. Kerr) and have restraint exercised by others. Other remedies there are none. If you will not help yourself, then put others in the position to help you as we have indicated.

E. PETERS.—Dr. Hincks Bird's plan of ventilating a room, which has been repeatedly described by us, is as follows:—Place a piece of wood about four inches deep along the sill of the window, so that the lower sash may rest exactly upon it. In this way, by raising the lower sash of the window above the upper sash at the middle—the upper sash not being disturbed—air comes in between the two sashes, and no draught is caused.

NOX.—A consequence of bad drainage. What you name shows that there must be a cesspool, as the house is not connected to any drain-system.

R. Y.—Try a tepid bath every morning, and wash regularly with Bayley's Spermaceti Soap. There is nothing radically wrong, or which attention to your skin will not cure. Internally, for a time, take fifteen drops Fer Bravais in water after your meals.

C. C. C.—Your best plan will be that of having the water direct from London. Messrs. Schacht & Co., 20, Finsbury-pavement, London, are the agents. Address them, and mention this journal as a reference.

RUBY.—The idea you name is absurd, and you should tell your friend so. The real fact is, that the alteration of the hour was a step in favour of health. The later hour was highly reprehensible as far as easy repose, and, therefore, health, was concerned.

JOE.—Read the pamphlet, "A Lecture to Young Men," post free for 1s. 1d. from Mr. Renshaw, 356, Strand, London, W.C., and you will find your mind relieved by its perusal. Follow out the diet-hints it gives, and beware of quacks.

E. HOWARD.—Press out the blackheads, and sponge the skin thereafter with Bayley's Lavender Water (17, Cockspur-street, Pall-mall, London, S.W.); take hot baths occasionally, and use Wilson's Friction Gloves and Towels.

OLGA.—There is no need for you to be in any way disheartened. Simply read carefully the pamphlet, "A Lecture to Young Men" (post free for 1s. 1d. from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the directions therein given regarding diet, tonics, and bathing.

RUSSO.—Have the following made up by your chemist, and adopt a light diet: Bicarbonate of soda, two drachms; dilute hydrocyanic acid, twelve minims; compound infusion of gentian, to eight ounces. Mix. Take one tablespoonful twice daily an hour before meals.

BERTIE.—Use Woolley's Sanitary Rose Powder after washing the parts night and morning with water as hot as can be borne.

AN EDITOR INVESTIGATES.

THE Tunbridge Wells *Courier* of April 20th says: "We are aware that many people are sceptically inclined towards patent medicines and advertisements of them, but few more striking instances of the advantage of keeping a *bona-fide* specific continually before the public notice can be referred to than the success which has attended Warner's SAFE Cure, of world-wide fame. This has been successfully kept under the notice of the people of this district for some time, and as if to clinch the arguments which have been periodically adduced, some very striking local testimonials have just been given. Local testimonials are facts that cannot very well be got rid of, and should afford a valuable stimulus to Messrs. Warner's specifics in this district. A well-known gentleman, the representative of a large business depôt in the town, called on us the other day, and observing that he had given an eulogistic testimonial of Warner's SAFE Nervine, published in our last issue, we interrogated him on the subject, for, unlike some of our contemporaries, we have always been chary of what medical advertisements find a place in our columns. Mr. Brunker's reply (for that is the gentleman to whom we allude) was even more eulogistic of Warner's specifics than his testimonial, of which he remarked that he did not think to say half what he might have done when it occurred to him to write it. Mr. Brunker's was evidently an extreme case, as he had failed in a neighbouring town where he had formerly resided to obtain relief from four doctors, but the particular specific of Messrs. Warner, which he got from a chemist when other remedies failed, acted, to use his own words, 'like magic.' As this matter has come under our personal observation, we feel it may be of interest to our readers who have perused Messrs. Warner's advertisement in our columns."

Editorial comment like the above is valuable because it is unsolicited. It proves that the remedy mentioned has merit, and that the testimonials given by people who have been benefited by its use are true and will stand investigation. Local testimonials, like the one referred to by the editor of the *Courier*, have been published in cities and towns throughout the United Kingdom. They are the plain, unvarnished statements of friends and neighbours whose health has been restored or whose lives have been saved by means of the remedies which they so thankfully praise. They are worth volumes of fine-spun theories, because they are the practical evidences of the great value of the medicines of which they speak—evidences which have sprung from the lips of sincere and grateful men and women, and as such are entitled to the respect and confidence of those who read them. A better verification of the statements made by the proprietors of Warner's SAFE Cure, that they have a sovereign remedy for all diseases of the kidneys, liver and urinary organs, could not be asked for. This great medicine can be had of all chemists at 4s. 6d. per bottle, or direct of H. H. Warner & Co., 86, Clerkenwell-road, London, E.C.

ELGIN.—A good lotion for blackheads is made by mixing three drachms of sulphur, four drachms of glycerine, and four ounces of rectified spirits. This should be rubbed into the skin at night. Take a Turkish bath occasionally.

E. G.—Do you mean the person who distributes quack pamphlets in the streets? If so, he is a well-known quack.

NUMBER ONE.—Use one of Howie's Filters (Hurlford, Kilmarnock, N.B.), advertised in our pages, as a simple and effective appliance.

UNUS.—You must re-state your inquiry. We do not preserve correspondence.

WORSTED.—Apply a little pure (white) vaseline to the eyelids each night, and avoid all reading and writing by artificial light for a time.

R. COOKSON.—If you will attend to Rule 4 to Correspondents and re-state your inquiry, we will send you address of a surgeon.

DAN CANTRELL.—See and follow advice given to "M. T." in the present number as regards the use of cod oil cream and Friar's Balsam inhalation at night. A change of air to the seaside would, however, probably cure you without drugs at all.

NEED.—Every four hours is certainly not too frequent; but if oftener, you might try care in your food, avoiding acids and sweets particularly. Take a little Vichy Water plain regularly night and morning, and add it to milk as a beverage. Probably fifteen drops Fer Bravais, taken after your meals, in water, might aid your cure.

J. T.—1. About a wineglass of water. 2. Certainly not; only don't wet your head in the bath. 3. Try Thomson's Cod Oil Cream (Dublin-street, Edinburgh) or the Kepler Malt Extract and Cod Oil combined. Ordinary cream might also be tried or the Cream-Milk of Loeflund & Co., 148½, Fenchurch-street, London, E.C. 4. White bread.

G. P.—Take the following pill:—Extract of Barbadoes aloes, two grains; extract of nux vomica, half a grain; extract of gentian, a grain and a half. Make a pill. One such pill to be taken once a day, half an hour before meals.

NOMINA.—Soda is certainly an unadvisable thing to take continuously. Avoid all salt foods, sugar, and sweets for a time, and give up taking cheese. Take each morning half a tumbler of Vichy Water, and in place of tea and coffee take milk to which a little plain soda water has been added. For the rest let your food be very simple, and see that you rest after your meals. A Vichy Pastille or two should be taken after your food for a few days by way of aiding your cure.

MENTONE.—Apply to the French Hygienic Society, 56, Conduit-street, Regent-street, London, W., for a safe hair-dye such as you demand.

F. P. P.—Barroughs, Wellcome & Co., Snow-hill Buildings, London, E.C., are the makers. All druggists know Fairchild's Peptonizing Powders.

Certain HARNESS' Cure.
ELECTROPATHIC BELT
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SLEEPLESSNESS.—The Rt. Hon. LORD BYRON says that—"*Harness' Electropathic Belt is invaluable for sleeplessness, I recommend it to all my friends.*"
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52, OXFORD ST. LONDON, W. (*Corner of Rathbone Place.*)
Call to-day, if possible, or write at once

PROXY.—Sit and rest with your feet elevated, so as to favour the return of the blood in the veins. Have the foot of your bed also elevated. Avoid constipation above all else, as this is a frequent cause of varicose veins, as also is long standing in business. You should get a surgeon to show you how the elastic bandage is to be applied.

SELPO.—Read the pamphlet advertised in our pages, "A Lecture to Young Men" (free by post for 1s. 1d., from Renshaw, 356, Strand, London, W.C.), and attend to the directions there given regarding your health.

L. M.—The Geddes' Hemlock Bark Extract should be tried by you. As an outward application or injection for the disease you name, it is most successful. The maker's address is 249, High Holborn, London, E.C.

PETER GREAVES.—By wetting your head in bathing such a headache is produced. Avoid wetting the head in your bath. If persistent headache follow bathing in the sea, despite your trial of above hints, we should advise you to renounce the practise. A cold sponge bath at home in the morning may suit you when open air bathing does not.

FAVOUR.—Give Dahl's Cakes (advertised in our pages) a fair trial for the relief of constipation. They form a remedy at once simple and effective.

LEM.—Try the effect of applying hot salt, dry, to the painful part, and rub the part each morning with a little Bow's liniment.

G. B. L. C.—Use the following for the hair:—Bay rum, two ounces; glycerine, two ounces; tincture of cantharides, one drachm; oil of bergamot, half a drachm; sulphate of quinine, ten grains; water, four ounces. To be used every morning, and to be rubbed into the roots of the hair, all other oils and pomades being avoided. Use a soft brush only, and wash the hair once in a week or ten days, at night, with Bayley's Soap and tepid water.

ADVICE TO PEOPLE ABOUT TO KEEP FOWLS.—Save your money, and buy some of Borwick's Gold Medal Baking Powder.

SCOTT'S EMULSION
OF PURE COD LIVER OIL
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Is three times as efficacious as the plain Oil.
It is almost as palatable as milk.
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The Hypophosphites and Oil are so skilfully combined, that they are much more potent in building up flesh and strength than if taken separately, and **SCOTT'S EMULSION** is to-day the best remedial agent for the cure of
CONSUMPTION, CHRONIC COUGHS, BRONCHITIS, ANÆMIA, WASTING DISEASES OF CHILDREN and GENERAL DEBILITY.
Physicians universally prescribe it in preference to the plain oil, having seen its remarkable curative effects.
Any chemist can supply it at 2/6 and 4/6.

EIGHT FIRST CLASS EXHIBITION AWARDS.
SCOTT'S For Infants, Children, and Persons of Weak Digestion.
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"Unequalled" OAT-FLOUR.
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SCOTT'S MIDLOTHIAN OAT-FLOUR.—There is no preparation which can be assimilated with greater facility than such a flour as this. Those who suffer from indigestion might substitute for their ordinary breakfast materials this flour, prepared according to the recipe given by Messrs. Scott, and printed on the tins.—ED. HEALTH.

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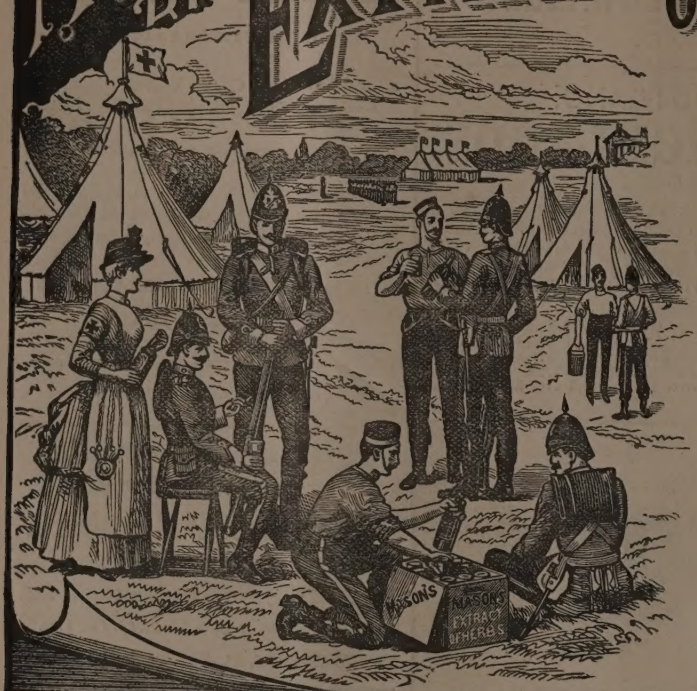

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